Test Report
Consistency test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At Site
Material	Cement
Sample No	1
Date	10-Apr-2018

Sl. No.	Description	Trial 1	Trial 2	Trial 3	Trial 4	Trial 4
1	Weight of Cement	400	400	400	400	400
2	Percentage of water added (%)	28	28.5	29	30.4	30.5
3	Weight of Water (gm)	112	114	116	121.6	122
4	Initial Reading of Plunger (mm)	40	40	40	40	40
5	Difference (mm)	18	17.5	12.2	6.3	5.6

Results: Standard Consistency of Cement: 30.40%

Note:

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For Mecadez Core Technologies Private Limited

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Test Report
Fineness test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At site
Material	Cement
Sample No	1
Date	10-Apr-2018

Sl. No.	Determination	Trial 1	Trial 2
1	Weight of Cement before sieve (gm)	100	100
2	Weight of residue retained on 90um sieve (gm)	3.4	3.2
3	Percentage retained (%)	3.4	3.2
4	Average Percentage retained (%)	3.30	

Results: Residue of cement is: 3.30%

Comments: Maximum allowable residue by mass for ordinary portlad cement is 10%

Note:

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Test Report
Soundness test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 4031 (Part 3) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At Site
Material	Cement
Sample No	1
Date	10-Apr-2018

Sl. No.	Description	Trial 1	Trial 2	Trial 3
1	Initial Distance between the indicator points of Lechatelier mould	11	10	11
2	Final Distance between the indicator points of Lechatelier mould	17	16	16
3	Difference or expansion	6	6	5
4	Average Differences or Expansion in mm	5.67		

Results: Difference in Expansion of Cement: 5.67mm

Comments: Maximum allowable Expansion of cement is 10mm.

Note:

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For Mecadez Core **Technologies Private Limited**

Test Report
Compressive strength test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Site
Material	Cement
Sample No	1
Date	5-Apr-2018

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (n/mm2)
1	43	7	-	0.83	70.6x70.6 x70.6	2358.65	184	4984.36	36.92	37.52
2	43	7	-	0.82	70.6x70.6 x70.6	2330.24	190	4984.36	38.12	

Results: 7-days Compressive strength of cement is 38.22N/mm^2

Comments: 7-days Compressive strength of cement should not be less than 33 N/mm^2

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Test Report
Compressive strength test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Condition	At Site
Material	Cement
Sample No	1
Date	26-Apr-2018

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (n/mm2)
1	43	28	-	0.85	70.6x70.6 x70.6	2415	230	4984.36	46.14	46.65
2	43	28	-	0.82	70.6x70.6 x70.6	2316	235	4984.36	47.15	

Results: 28-days Compressive strength of cement is 45.75N/mm^2

Comments: 28-days Compressive strength of cement should not be less than 43 N/mm^2

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Test Report
Gradation test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Lab No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Fine Aggregates
Sample No	1
Date	10-Apr-2018

Weight of Sample(gram): 200

Sl.No.	IS Sieve Size	Weight retained	% retained	% Cumulative	Cumulative % of Passing		Remarks
					% Passing	Gradation limits	
1	10 mm	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Zone ll Specification
2	4.75 mm	18	9.00	9.00	91.00	90-100	
3	2.36 mm	22	11.00	20.00	80.00	75-100	
4	1.18 mm	17	8.50	28.50	71.50	55-90	
5	600 µ	43	21.50	50.00	50.00	35-59	
6	300 µ	62	31.00	81.00	19.00	8-30	
7	150 µ	31	15.50	96.50	3.50	0-10	

Note:

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Test Report
Gradation test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Lab No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Fine Aggregates
Sample No	2
Date	10-Apr-2018

Weight of Sample(gram): 200

Sl No.	IS Sieve Size	Weight retained	% retained	% Cumulative	Cumulative % of Passing		Remarks
					% Passing	Gradation limits	
1	10 mm	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Zone ll Specification
2	4.75 mm	14	7.00	7.00	93.00	90-100	
3	2.36 mm	24	12.00	19.00	81.00	75-100	
4	1.18 mm	18	9.00	28.00	72.00	55-90	
5	600 µ	40	20.00	48.00	52.00	35-59	
6	300 µ	62	31.00	79.00	21.00	8-30	
7	150 µ	34	17.00	96.00	4.00	0-10	

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Test Report
Gradation test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Lab No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse aggregates
Sample No	1
Date	10-Apr-2018

Weight of Sample: 4000 gms

Sl. No	I.S. Sieve size	Weight Retained (gm)	of weight Retained (%)	ive Percentage of	Passing		Remarks
					Test Result	Gradation Limits as per	
1	31.50	0	0.00	0.00	100.00	100	
2	26.50	493	12.33	12.33	87.68	85-95	Material Satisfies the PQC Gradation
3	19.00	234	5.85	18.18	81.83	68-88	
4	9.50	676	16.90	35.08	64.93	45-65	
5	4.75	420	10.50	45.58	54.43	30-55	
6	0.60	970	24.25	69.83	30.18	8-30	
7	0.15	850	21.25	91.08	8.93	5-15	
8	0.08	255	6.38	97.45	2.55	0-5	

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Test Report
Gradation test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Lab No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse aggregates
Sample No	2
Date	10-Apr-2018

Weight of Sample: 4000 gms

Sl. No	I.S. Sieve size	Weight Retained (gm)	of weight Retained (%)	ive Percentage of	Passing		Remarks
					Test Result	Gradation Limits as per	
1	31.50	0	0.00	0.00	100.00	100	Material Satisfies the PQC Gradation
2	26.50	490	12.25	12.25	87.75	85-95	
3	19.00	325	8.13	20.38	79.63	68-88	
4	9.50	630	15.75	36.13	63.88	45-65	
5	4.75	422	10.55	46.68	53.33	30-55	
6	0.60	939	23.48	70.15	29.85	8-30	
7	0.15	844	21.10	91.25	8.75	5-15	
8	0.08	264	6.60	97.85	2.15	0-5	

Note:

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For Mecadez Core Technologies Private Limited

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Test Report
Water absorption test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Mix Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 2386 (Part - 3) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse aggregates
Sample No	1
Date	10-Apr-2018

Sl. No.	Particulars	Computations	Test Numbers		Mean
			Test 1	Test 2	
1	Weight of SSD sample	W_1 g	761	763	
2	Aggregates Immersed in	W_2g	2070	2065	
3	Weight of Saturated Aggregate in water	$W_s g = W_2 - W_1$	1309	1302	
4	dry aggregate in Air	W_3 g	2105	2090	
5	Volume of the Aggregate	$W_3 - W_s$	796	788	
6	Aggregate	W_4g	2066	2061	
7	Specific Gravity	$W_4/(W_3 - W_s)$	2.60	2.62	2.61
8	Apparent Specific Gravity	$W_4/(W_4 - W_s)$	2.73	2.72	2.72
9	Water Absorption	$(W_4 - W_3)*100/W_4$	1.89	1.41	1.65

Comments: Maximum allowable Aggregate Water Absorption value for PCC is 2.0%.

Note:

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Test Report
Water absorption test

Project Name	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
Client	Executive Engineer, Project Division Yalahanka
Job No	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
Test Type	Plain cement concrete(1:3:6)
Contractor	M/s. K.R.I.D.L
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Coarse Aggregates
Sample No	2
Date	10-Apr-2018

Sl. No.	Particulars	Computations	Test Numbers		Mean
			Test 1	Test 2	
1	Immersed in Water	W_1 g	765	765	
2	Aggregates Immersed in	W_2g	2070	2085	
3	Weight of Saturated Aggregate in water	$W_s g = W_2 - W_1$	1305	1320	
4	dry aggregate in Air	W_3 g	2105	2110	
5	Volume of the Aggregate	$W_3 - W_s$	800	790	
6	Aggregate	W_4g	2066	2081	
7	Specific Gravity	$W_4/(W_3 - W_s)$	2.58	2.63	2.61
8	Apparent Specific Gravity	$W_4/(W_4 - W_s)$	2.71	2.73	2.72
9	Water Absorption	$(W_4 - W_3)*100/W_4$	1.89	1.39	1.64

Comments: Maximum allowable Aggregate Water Absorption value for PCC is 2.0%.

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PROJECT MANAGEMENT & CONSULTANCYSERVICES

Test Report
Concrete Compresive strength

	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
	Executive Engineer, Project Division Yalahanka
	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
	Concrete(M20) for Raft
	M/s. K.R.I.D.L
	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
	Bay
	Concrete
	1
	25-Apr-2018

	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
	20	7	6.82	150*150*150	2020.74	322	0.0225	14.31	14.01	14.18
	20	7	6.83	150*150*150	2023.70	314	0.0225	13.96		
	20	7	6.69	150*150*150	1981.93	310	0.0225	13.78		
	20	7	7.01	150*150*150	2077.04	318	0.0225	14.13	14.34	
	20	7	6.82	150*150*150	2020.74	325	0.0225	14.44		
	20	7	6.79	150*150*150	2012.15	325	0.0225	14.44		

7-days Compressive strength of cement is 14.18 N/mm2

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Test Report

Concrete Compresive strength

	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
	Executive Engineer, Project Division Yalahanka
	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
	Concrete(M20) for Raft
	M/s. KRISHNA
	IS: 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
	Site
	Concrete
	21
	23-Apr-2018

Sl No.	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Streng
	20	7	6.92	150*150*150	2050.37	324	0.0225	14.40	14.10	14.27
	20	7	6.94	150*150*150	2056.30	316	0.0225	14.04		
	20	7	6.78	150*150*150	2008.89	312	0.0225	13.87		
	20	7	7.19	150*150*150	2130.37	320	0.0225	14.22	14.43	
	20	7	6.90	150*150*150	2044.44	327	0.0225	14.53		
	20	7	6.92	150*150*150	2050.37	327	0.0225	14.53		

7 days Compressive strength of cement is 14.27 N/mm2

Note:

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For Mecadez Core Technologies Private Limited

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Test Report
Concrete Compresive strength

	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
	Executive Engineer, Project Division Yalahanka
	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
	Concrete(M20) for Raft
	M/s. K.R.I.D.L
	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
	Bay
	Concrete
	21
	25-Apr-2018

	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strengt
	20	7.00	7.01	150*150*150	2077.04	326.00	0.0225	14.49	14.19	14.36
	20	7.00	7.03	150*150*150	2082.96	318.00	0.0225	14.13		
	20	7.00	6.87	150*150*150	2035.56	314.00	0.0225	13.96		
	20	7.00	7.28	150*150*150	2157.04	322.00	0.0225	14.31	14.52	
	20	7.00	6.99	150*150*150	2071.11	329.00	0.0225	14.62		
	20	7.00	7.01	150*150*150	2077.04	329.00	0.0225	14.62		

7 days Compressive strength of cement is 14.36 N/mm2

Note :

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Test Report
Concrete Compresive strength

	Asphalting road from Amruthahalli main road to Jakkur Burial ground in Ward No.05
	Executive Engineer, Project Division Yalahanka
	MCTPL/BBMP/Project-YNK/2017-2018/QR/01
	Concrete(M20) for Raft
	M/s. KLR.I.D.L
	IS : 4032 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
	Bay
	Concrete
	4
	25-Apr-2018

	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
	20	7	7.11	150*150*150	2106.67	328.00	0.0225	14.58	14.28	14.44
	20	7	7.13	150*150*150	2112.59	320.00	0.0225	14.22		
	20	7	6.97	150*150*150	2065.19	316.00	0.0225	14.04		
	20	7	7.38	150*150*150	2186.67	324.00	0.0225	14.40	14.61	
	20	7	7.09	150*150*150	2100.74	331.00	0.0225	14.71		
	20	7	7.11	150*150*150	2106.67	331.00	0.0225	14.71		

Compressive strength of cement is 14.44 N/mm2

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